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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,240	02/20/2004	Rohit Amamath	01035-1002	1403

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EXAMINER

MEHRMANESH, ELMIRA

ART UNIT PAPER NUMBER

2113

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/783,240	AMARNATH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Elmira Mehrmanesh	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The application of Amarnath et al., for an "Event sensing and meta-routing process automation" filed February 20, 2004, has been examined.

Claims 1-20 are presented for examination.

Claims 1-10, and 20 is rejected under 35 USC § 101.

Claims 1-20 are rejected under 35 USC § 102.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The limitation "System" claimed as computer listings per se, i.e., the descriptions or expressions of the programs, (in view of Applicant's disclosure, specification page 13) are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized.

Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In view of Applicant's disclosure, specification page 18, the medium is not limited to tangible embodiments, instead being defined as

including both tangible embodiments (e.g., specification, page 18, lines 3-10, floppy disk, CD, DVD) and intangible embodiments (e.g., specification, page 18, lines 3-10, via electromagnetic waves, such as those generated during radio frequency (RF) and infrared (IR) data communications). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Golani et al. (U.S. PGPUB No. 20040260590).

As per claim 1, Golani discloses a distributed system for process automation (Fig. 1) said distributed system comprising a computer-readable medium (page 2, paragraph [0031]), an event router component (Fig. 1, element 32), a means to start component, a conductor component and a plurality of distributed services agents (Fig. 1),

said computer-readable medium storing a representation of the process as a plurality of nodes and a plurality of directed links (Fig. 2), each said node having a plurality of attributes, each of said directed links connecting two of said nodes and representing the sequencing and possibly data dependency between the two of said nodes, said plurality of nodes including a plurality of start nodes (Fig. 2) and (page 3, paragraphs [0045] and [0046])

said event router component receiving status transition events for said nodes and dispatching said events to said conductor and distributed services agents components (Fig. 1, element 32)

said means to start component producing `ready2go` events for said plurality of start nodes (Fig. 4, element 60), said conductor component handling `ready2go` and `completed` events (page 4, paragraph [0055]) by generating `inprocess` events in response to `ready2go` events and deciding when to produce additional `ready2go` events for successor nodes in response to `completed` events (Fig. 4, element 63), and said distributed services agent handling `inprocess` events by performing application work and producing `completed` or `error` events (page 3, paragraph [0043]).

As per claim 2, Golani discloses said representation is configured to define non-overlapping sections of the process, and having at most as many active instances of the process as said non overlapping sections of the process, wherein each of said instances of the process having at most one non-overlapping section that has nodes in

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statuses other than `notreached` or `completed`, and nodes in other sections in the same `notreached` or `completed` status (page 5, paragraph [0068]).

As per claim 3, Golani discloses said representation is configured to specify cached data in a node, such that a successor node to said node starts execution further when the status of said node is `notreached` (page 4, paragraph [0062]).

As per claim 4, Golani discloses said representation is configured to define sub-flows, and a means to invoke a plurality of instances of said sub-flows (page 2, paragraph [0021]).

As per claim 5, Golani discloses said representation is configured to define an error handling flow, and invoke one instance of said error handling flow when one node in said plurality of nodes receives an `error` event (page 4, paragraphs [0056], [0057], [0058]).

As per claim 6, Golani discloses a means to evaluate at run time said node attributes and using said evaluated attributes when performing said application work (page 3, paragraph [0043] and page 5, paragraph [0065]).

As per claim 7, Golani discloses said means to evaluate at run time said node attributes comprises computing parameters and having a means to handle parameter

clashes (page 4, paragraph [0062] and page 5, paragraph [0065]).

As per claim 8, Golani discloses said representation is configured to specify conditional dependencies, and said conductor component recognize a `pseudo-completed` event for nodes transitioned to via non satisfied said conditional dependencies (page 5, paragraph [0066]).

As per claim 9, Golani discloses a repository component that stores the event history, and a means to play back the process execution based on said event history (Fig. 1, element 34).

As per claim 10, Golani discloses a plurality of domains, wherein each of said domains has a plurality of processes out of which at most one is active at any time (page 2, paragraph [0016]).

As per claim 11, Golani discloses a method for dataflow automation in a system comprising a plurality of data management systems (Fig. 1), comprising:

storing a representation of the dataflow having a plurality of nodes and links (Fig. 2), wherein each of the nodes corresponds to a process managing a portion of the dataflow in one of the data management systems, and each of the links connect two of the nodes and correspond to a dependency between two of the processes that correspond to the two of the nodes (Fig. 2) and (page 3, paragraphs [0045] and [0046])

sensing an event that occurs in one of the processes managing the dataflow in one of the data management systems, wherein the sensed event indicating whether the one of the processes has completed or has produced an error (page 3, paragraph [0043])

in response to the sensed event, scheduling a task to manage data portion of the dataflow in another process in another of the data management system based whether events have been received indicating that predecessors for the other process indicated in the representation has completed or has produced an error (page 4, paragraph [0060]).

As per claim 12, Golani discloses tagging some of the nodes in the representation as boundary nodes that define a plurality of sections of the dataflow, wherein the scheduled task is operating in one of the sections; and scheduling another task in another section of the dataflow, wherein the scheduled tasks and the other scheduled task are active at the same time (page 4, paragraph [0060]).

As per claim 13, Golani discloses defining, in the representation, a subroutine of sub-flows that specifies a set of processes to be executed based on an invoking node; and executing the subroutine of sub-flows at an invoking node (page 2, paragraph [0021]).



As per claim 14, Golani discloses the subroutine of sub-flows includes an error handler subroutine (page 4, paragraphs [0056], [0057], [0058]).

As per claim 15, Golani discloses storing an attribute for each node in the representation as a string that references one or more parameters produced by predecessor nodes of the node; and substituting the parameters in the attribute when invoking a process corresponding to the node (page 3, paragraphs [0043]).

As per claim 16, Golani discloses determining whether at least two of the predecessor nodes have produced a parameter with a same name; and selecting a value of the most recent parameter when at least two of the predecessor nodes have produced a parameter with a same name (page 4, paragraphs [0063]).

As per claim 17, Golani discloses selecting a successor process from among a plurality of successor processes at node to schedule based on a condition; scheduling a task for the selected successor process; and marking other of the successor process with one of a status indicating a completion (page 4, paragraphs [0060]).

As per claim 18, Golani discloses recording events and invocation of processes in a repository; and playing back the recorded events and invocation of processes (Fig. 1, element 34).

As per claim 19, Golani discloses defining a plurality of domains; and executing a separate dataflow in each of the domains (page 2, paragraphs [0016]).

As per claim 20, Golani discloses a computer-readable medium bearing instructions for dataflow automation, said instructions being arranged, upon execution by one or more processors, to perform the method according to claim 11 (page 2, paragraphs [0031]).

### **Related Prior Art**

The following prior art is considered to be pertinent to applicant's invention, but nor relied upon for claim analysis conducted above.

Donahue et al. (U.S. Patent No. 6,101,180), "High bandwidth broadcast system having localized multicast access to broadcast content".

Webster et al. (U.S. Patent No. 5,617,214), "Commitment groups to generalize the scheduling of interdependent document output terminal capabilities".

Adendorff et al. (U.S. PG PUB No. 20020099563), "Data warehouse system".

### **Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elmira Mehrmanesh whose telephone number is (571) 272-5531. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel can be reached on (571) 272-3645. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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